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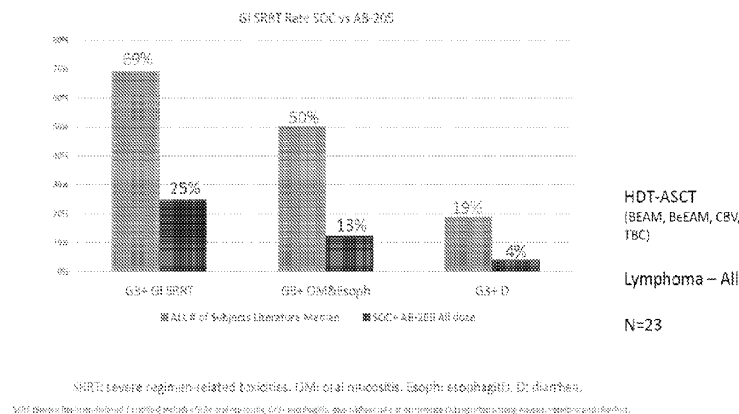


Fig. 1

(57) Abstract: The present invention provides compositions and methods for the mitigation of side effects of chemotherapy, for example in human subjects with hematologic malignancies (such as lymphoma, leukemia and myelodysplastic syndrome) as well as subjects with other malignancies or other conditions that may be treated with chemotherapy, such as high dose therapy (HOT) or a combination of high dose HDT and a hematopoietic stem cell transplant. The methods comprise administration of endothelial cells, such as engineered human umbilical vein endothelial cells engineered to express the adenoviral E40RF1 protein (E40RF1+ HUVECs), to human subjects. The side effects mitigated by the compositions and methods of the invention include, but are not limited to, oral / gastrointestinal side effects and febrile neutropenia.

[Continued on next page]

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